#### ARTICLE 14. TRAUMA REGISTRY; TRAUMA SYSTEM QUALITY ASSURANCE Section

- R9-25-1401. Definitions (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))
- R9-25-1402. Data Submission Requirements (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))
- Table 1. Trauma Registry Data Set (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))
- R9-25-1403. Trauma System Data Reports; Requests for Trauma Registry Reports (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, and 36-2225(A)(5) and (6))
- R9-25-1404. Retention of Reports and Requests for Reports (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))
- R9-25-1405. Confidentiality and Retention of Trauma System Quality Assurance Data (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, 36-2223(E)(3), 36-2225(A)(5) and (6), 36-2403(A), and 36-2404)
- R9-25-1406. Trauma Registry Data Quality Assurance (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, and 36-2225(A)(5) and (6))

# ARTICLE 14. TRAUMA REGISTRY; TRAUMA SYSTEM QUALITY ASSURANCE R9-25-1401. Definitions (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))

The following definitions apply in this Article, unless otherwise specified:

- 1. "Aggregate trauma data" means a collection of data from the trauma registry that is compiled so that it is not possible to identify a particular trauma patient, trauma patient's family, health care provider, or health care institution.
- 2. "AIS" means abbreviated injury scale, an anatomic severity scoring system established in Association for the Advancement of Automotive Medicine Committee on Injury Scaling, Abbreviated Injury Scale (AIS) 2005 (2005), incorporated by reference, including no future editions or amendments, and available from Association for the Advancement of Automotive Medicine, P.O. Box 4176, Barrington, IL 60011-4176, and www.carcrash.org.
- 3. "ALS base hospital" has the same meaning as "advanced life support base hospital" in A.R.S. 36-2201.

- 4. "Case" means a patient who meets R9-25-1402(A)(1), (2), or (3).
- 5. "Category" means a group of related codes within the ICD-9-CM, identified by the first three digits of each code number within the group, and including all code numbers that share the same first three digits.
- 6. "Data element" means a categorized piece of information.
- 7. "Data set" means a collection of data elements that includes, for each case, data that complies with Table 1.
- 8. "Department" means the Arizona Department of Health Services.
- 9. "ED" means emergency department, an organized area of a hospital that provides unscheduled emergency services, as defined in A.A.C. R9-10-201, 24 hours per day, 7 days per week, to individuals who present for immediate medical attention.
- 10. "EMS" has the same meaning as "emergency medical services" in A.R.S. § 36-2201.
- 11. "EMS provider" has the same meaning as "emergency medical services provider" in A.R.S. § 36-2201.
- 12. "GCS" means Glasgow Coma Scale, a scoring system that defines eye, motor, and verbal responses in the patient with injury.
- 13. "Health care institution" has the same meaning as in A.R.S. § 36-401.
- 14. "Health care provider" means a caregiver involved in the delivery of trauma services to a patient, whether in a prehospital setting, in a hospital setting, or during rehabilitation.
- 15. "Hospital" has the same meaning as in A.A.C. R9-10-201.
- 16. "ICD-9-CM" has the same meaning as in A.A.C. R9-4-101.
- 17. "ICD-9-CM E-code" means the external cause of injury as coded according to the ICD-9-CM.
- 18. "ICD-9-CM N-code" means the nature of injury as coded according to the ICD-9-CM.
- 19. "ICD-9-CM Procedure Code" means the procedure performed on a patient as coded according to the ICD-9-CM.
- 20. "Injury" means the result of an act that damages, harms, or hurts; unintentional or intentional damage to the body resulting from acute exposure to mechanical, thermal, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.
- 21. "ISS" has the same meaning as in R9-25-1301.
- 22. "Owner" has the same meaning as in R9-25-1301.
- 23. "Patient" means an individual who is sick, injured, or dead and who requires medical monitoring, medical treatment, or transport.

- 24. "Scene" means a location, other than a health care institution, from which a patient is transported.
- 25. "Submitting health care institution" means a health care institution that submits data to the trauma registry as provided in R9-25-1402.
- 26. "Trauma center" means a health care institution that meets the definition of "trauma center" in A.R.S. § 36-2201 or the definition of "trauma center" in A.R.S. § 36-2225.
- 27. "Trauma registry" has the same meaning as in A.R.S. § 36-2201.
- 28. "Trauma team" means a group of health care providers organized to provide care to trauma patients.
- 29. "Trauma team activation" means notification of trauma team members in response to triage information received concerning a patient with injury or suspected injury.
- 30. "Trauma triage protocol" means a "triage protocol," as defined in R9-25-101, specifically designed for use with patients with injury.

## R9-25-1402. Data Submission Requirements (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))

- As required under A.R.S. § 36-2221 and R9-25-1313, an owner of a trauma center shall ensure that the data set identified in Table 1 is submitted to the Department, as prescribed in subsection (B), for each patient who meets one or more of the following criteria:
  - 1. A patient with injury or suspected injury who is triaged from a scene to a trauma center or ED based upon the responding EMS provider's trauma triage protocol;
  - A patient with injury or suspected injury for whom a trauma team activation occurs;
     or
  - 3. A patient with injury who is admitted as a result of the injury or who dies as a result of the injury, who has an ICD-9-CM N-code within categories 800 through 959, and who does not only have:
    - a. Late effects of injury or another external cause, as demonstrated by an ICD 9-CM N-code within categories 905 through 909;
    - b. A superficial injury or contusion, as demonstrated by an ICD-9-CM N-code within categories 910 through 924;
    - c. Effects of a foreign body entering through an orifice, as demonstrated by an ICD-9-CM N-code within categories 930 through 939;
    - d. An isolated femoral neck fracture from a same-level fall, as demonstrated by:
      - i. An ICD-9-CM N-code within category 820; and
      - ii. An ICD-9-CM E-code within category E885 or E886;

- e. An isolated distal extremity fracture from a same-level fall, as demonstrated by:
  - i. An ICD-9-CM N-code within categories 813 through 817 or within categories 823 through 826; and
  - ii. An ICD-9-CM E-code within category E885 or E886;
- f. An isolated burn, as demonstrated by an ICD-9-CM N-code within categories 940 through 949.
- **B.** An owner of a trauma center shall submit the data required under subsection (A) to the Department:
  - 1. On a quarterly basis according to the following schedule:
    - a. For cases identified between January 1 and March 31, so that it is received by the Department by July 1 of the same calendar year;
    - b. For cases identified between April 1 and June 30, so that it is received by the Department by October 1 of the same calendar year;
    - c. For cases identified between July 1 and September 30, so that it is received by the Department by January 2 of the following calendar year; and
    - d. For cases identified between October 1 and December 31, so that it is received by the Department by April 1 of the following calendar year;
  - 2. Through an electronic reporting system authorized by the Department;
  - 3. In a format authorized by the Department; and
  - 4. Along with the following information:
    - a. The name and physical address of the trauma center;
    - b. The date the trauma data is being submitted to the Department;
    - c. The total number of cases for whom trauma data is being submitted;
    - d. The quarter and year for which trauma data is being submitted;
    - e. The range of ED or hospital arrival dates for the cases for whom trauma data is being submitted;
    - f. The name, title, phone number, fax number, and e-mail address of the trauma center's point of contact for the trauma data; and
    - g. Any special instructions or comments to the Department from the trauma center's point of contact.
- C. An ALS base hospital certificate holder that chooses to submit trauma data to the Department, as provided in A.R.S. § 36-2221, shall comply with the data submission requirements in this Section for an owner of a trauma center.

Table 1. Trauma Registry Data Set (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))

#### KEY:

Required for TC Levels I, II, and III = An owner of a hospital designated as a Level I, Level II, or Level III trauma center under Article 13 of this Chapter shall include these data elements in the data submission required under R9-25-1402.

Required for TC Level IV, Non-Designated TC, and ALS Base Hospital = An owner of a health care institution designated as a Level IV trauma center under Article 13 of this Chapter; an owner of a trauma center, as defined in A.R.S. § 36-2201, that is not designated as a trauma center under Article 13 of this Chapter; or an ALS base hospital certificate holder that submits trauma data as provided under A.R.S. § 36-2221 shall include these data elements in the data submission required under R9-25-1402.

\* = Only required for hospitals designated as Level I trauma centers under Article 13 of this Chapter.

Field Name/Data Element Description	Required for TC Levels I, II, and III	Required for TC Level IV, Non- Designated TC, and ALS Base Hospital	
DEMOGRAPHIC DATA ELEMENTS			
Reporting Facility Site ID	X	X	
Registration Number	X	X	
Medical Record Number	X	X	
Hospital Admission Date	X	X	
Admission Status	X	X	
Patient Last Name	X	X	
Patient First Name	X	X	
Patient Middle Initial	X	X	
Social Security Number	X	X	
Date of Birth	X	X	
Age	X	X	
Units of Age	X	X	
Gender	X	X	
Race	X	X	
Ethnicity	X	X	
Zip Code of Residence	X		
City of Residence	X		
County of Residence	X		
State of Residence	X	X	
Country of Residence	X		
Alternate Home Residence	X		
Co-Morbid Conditions (Pre-Existing)	X		

Field Name/Data Element Description	Required for TC Levels I, II, and III	Required for TC Level IV, Non- Designated TC, and ALS Base Hospital
INJURY DATA ELI	EMENTS	1125 2450 1105 61441
Injury Date	X	X
Injury Time	X	X
Actual versus Estimated Injury Time	X	
Injury Location ICD-9-CM E-code (E849)	X	X
Street Location of Injury	X	
Zip Code of Injury	X	X
City of Injury	X	X
County of Injury	X	11
State of Injury	X	
Primary ICD-9-CM E-code Injury Descriptor	X	X
Additional ICD-9-CM E-code Injury Descriptor	X	11
Trauma Type	X	
Work-Related	X	
Patient Occupational Industry	X	
Patient Occupation	X	
Patient Position in Vehicle	X	
Protective Devices	X	X
Child Specific Restraint	X	Λ
Airbag Deployment	X	
Safety Equipment Issues	X	
PREHOSPITAL TRANSPORT		
EMS Provider Type	X	
Transport Mode (Into Reporting Facility)	X	X
Other Transport Modes	X	Α
Transport Agency	X	
Run Sheet Available?	X	
Run Sheet Avanable:  Run Sheet Date	X	
	X	
Transported From Date EMS Provider Notified		
	X	
Time EMS Provider Notified	X	
Date EMS Provider Left for Scene		
Time EMS Provider Left for Scene	X	
Date EMS Provider Arrived at Scene	X	
Time EMS Provider Arrived at Scene	X	
Date of EMS Patient Contact	X	
Time of EMS Patient Contact	X	
Date EMS Provider Departed Scene	X	
Time EMS Provider Departed Scene	X	
Date of Arrival at Destination	X	
Time of Arrival at Destination	X	
EMS Destination	X	

Field Name/Data Element Description	Required for TC Levels I, II, and III	Required for TC Level IV, Non- Designated TC, and ALS Base Hospital
Total EMS Response Time (Minutes)	X	•
Total EMS Scene Time (Minutes)	X	
Transport Time – Scene to Destination (Minutes)	X	
Total EMS Time (Minutes)	X	
System Access	X	
Triage Criteria	X	X
Date of Measurement of Vital Signs	X	
Time of Measurement of Vital Signs	X	
Initial Field Pulse Rate	X	
Initial Field Respiratory Rate	X	
Initial Field Oxygen Saturation	X	
Field Airway Management Details	X	
Field Intubation Status	X	
Field Paralytic Agent in Effect	X	
Initial Field Systolic Blood Pressure	X	
Initial Field GCS – Eye Opening	X	
Initial Field GCS – Verbal Response	X	
Initial Field GCS – Motor Response	X	
Initial Field GCS – Total	X	
Field Revised Trauma Score	X	
REFERRING/TRANSFER HOSPIT		TS .
Interfacility Transfer	X	
Date of Arrival at First Referring Hospital	X	
Time of Arrival at First Referring Hospital	X	
Date of Transfer from First Referring Hospital	X	
Time of Transfer from First Referring Hospital	X	
Transferring Facility (First Referring)	X	
Length of Stay in First Referring Hospital (Hours)	X	
Destination Facility	X	
Date of Arrival at Second Referring Hospital	X	
Time of Arrival at Second Referring Hospital	X	
Date of Transfer from Second Referring Hospital	X	
Time of Transfer from Second Referring Hospital	X	
Transferring Facility (Second Referring)	X	
Length of Stay in Second Referring Hospital (Hours)	X	
Destination Facility	X	
Vital Signs Designation (If First or Second Referring)	X	
Initial Respiratory Rate in Referring Facility	X	
Initial Systolic Blood Pressure in Referring Facility	X	
Initial GCS Total in Referring Facility	X	
Initial Revised Trauma Score in Referring Facility	X	
ED/TRAUMA DATA E	LEMENTS	
ED/Hospital Arrival Date	X	X

Field Name/Data Element Description	Required for TC Levels I, II, and III	Required for TC Level IV, Non- Designated TC, and ALS Base Hospital
ED/Hospital Arrival Time	X	X
ED Exit Date	X	X
ED Exit Time	X	X
Length of Stay in ED (Hours)	X	X
Complete Trauma Team Arrival Time	X	
ED Discharge Disposition	X	X
ED Discharge Destination Hospital	X	X
Discharge Transport Agency	X	
Transfer Reason	X	
ED/Hospital Initial Pulse Rate	X	
ED/Hospital Initial Respiratory Rate	X	
ED/Hospital Initial Respiratory Assistance	X	
ED/Hospital Initial Oxygen Saturation	X	
ED/Hospital Initial Supplemental Oxygen	X	
ED/Hospital Intubation Status	X	
ED/Hospital Paralytic Agent in Effect	X	
ED/Hospital Initial Systolic Blood Pressure	X	
ED/Hospital Initial GCS – Eye Opening	X	
ED/Hospital Initial GCS – Verbal Response	X	
ED/Hospital Initial GCS – Motor Response	X	
ED/Hospital Initial GCS – Total	X	
ED/Hospital Initial GCS Assessment Qualifiers	X	
ED/Hospital Initial Temperature	X	
ED/Hospital Initial Units of Temperature	X	
ED/Hospital Initial Temperature Route	X	
ED/Hospital Initial Revised Trauma Score	X	
Alcohol Use Indicator	X	
Blood Alcohol Content (mg/dl)	X	
	X	
Drug Use Indicator		
Toxicology Substances Found  DISCHARGE DATA EI	X	
Hospital Discharge Date	X	X
Hospital Discharge Time	X	X
Hospital Admission Length of Stay (Days)	X	X
Total Length of Hospital Stay – ED plus Admission (Days)	X	A
Final Outcome – Dead or Alive	X	X
Total ICU Length of Stay (Days)	X	X
Total Ventilator Days	X	Λ
Hospital Discharge Disposition	X	X
1		
Hospital Discharge Destination Hospital	X	X
Discharge Transport Agency	X	
Transfer Reason	X	

Field Name/Data Element Description	Required for TC Levels I, II, and III	Required for TC Level IV, Non- Designated TC, and ALS Base Hospital
Autopsy Identification Number	X	
Injury Diagnoses – ICD-9-CM N-codes	X	X
AIS Six-Digit Injury Identifier	X*	
AIS Severity Code	X	
AIS Body Region of Injury	X	
Injury Severity Score	X	
Probability of Survival	X	
ED/Hospital Procedure Location	X	
ED/Hospital Procedure Start Date	X	
ED/Hospital Procedure Start Time	X	
ED/Hospital ICD-9-CM Procedure Codes	X	
Hospital Complications	X	
Primary Method of Payment	X	
Secondary Method of Payment	X	
Total Hospital Charges	X	
Total Reimbursements	X	

# R9-25-1403. Trauma System Data Reports; Requests for Trauma Registry Reports (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, and 36-2225(A)(5) and (6))

- **A.** The Department shall produce and disseminate to each submitting health care institution a quarterly trauma system data report that includes statewide aggregate trauma data.
- **B.** A person may request to receive a report containing statewide aggregate trauma data for data elements not included in the quarterly trauma system data report by submitting a written public records request to the Department as provided in A.A.C. R9-1-303.
- **C.** The Department shall process a request for a report submitted under subsection (B) as provided in A.A.C. R9-1-303.
- **D.** As provided in A.R.S. § 36-2220(A)(1), Trauma Registry data from which a patient, the patient's family, or the patient's health care provider or facility might be identified is confidential and is not available to the public.

#### R9-25-1404. Retention of Reports and Requests for Reports (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2221, and 36-2225(A)(5) and (6))

The Department shall retain copies of each quarterly trauma system data report, request for a report submitted under R9-25-1403(B), and report generated under R9-25-1403(B) for at least 10 years after the date of the report or request for a report.

# R9-25-1405. Confidentiality and Retention of Trauma System Quality Assurance Data (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, 36-2223(E)(3), 36-2225(A)(5) and (6), 36-2403(A), and 36-2404)

- As provided in A.R.S. §§ 36-2220(A)(2) and 36-2403(A), all data and documents obtained by the Department or considered by the Department, the State Trauma Advisory Board, or a State Trauma Advisory Board subcommittee for purposes of trauma system quality assurance are confidential and are not available to the public.
- **B.** The Department shall ensure that:
  - 1. Each member of the State Trauma Advisory Board or member of a State Trauma Advisory Board subcommittee who will have access to the data and documents described in subsection (A) executes a written confidentiality statement before being allowed access to the data and documents;
  - All trauma system quality assurance activities are completed in executive session during State Trauma Advisory Board or State Trauma Advisory Board subcommittee meetings;
  - 3. Except for one historical copy, all copies of data and documents described in subsection (A) and used during an executive session are collected at the end of the executive session and destroyed after the State Trauma Advisory Board or State Trauma Advisory Board subcommittee meeting; and
  - Executive session minutes and all copies of data and documents described in subsection (A) are maintained in a secure area and are accessible only to authorized Department employees.

### R9-25-1406. Trauma Registry Data Quality Assurance (Authorized by A.R.S. §§ 36-2202(A)(4), 36-2208(A), 36-2209(A)(2), 36-2220(A), 36-2221, and 36-2225(A)(5) and (6))

- A. To ensure the completeness and accuracy of trauma registry reporting, a submitting health care institution shall allow the Department to review the following, upon prior notice from the Department of at least five business days:
  - 1. The submitting health care institution's database that includes data regarding cases;
  - 2. Patient medical records; and
  - 3. Any record, other than those specified in subsections (A)(1) and (2), that may contain information about diagnostic evaluation or treatment provided to a patient.
- **B.** Upon prior notice from the Department of at least five business days, a submitting health care institution shall provide the Department with all of its patient medical records for a time period specified by the Department, to allow the Department to review the patient medical

- records and determine whether the submitting health care institution has submitted data to the trauma registry for the cases who received medical services within the time period.
- C. For purposes of subsection (B), the Department considers a submitting health care institution to be in compliance with R9-25-1402(A) if the submitting health care institution submitted data to the trauma registry for 97% of the cases who received medical services within the time period.
- **D.** The Department shall return to a submitting health care institution data not submitted in compliance with R9-25-1402 and shall identify the revisions that are needed to bring the data into compliance with R9-25-1402.
- **E.** A submitting health care institution that has trauma registry data returned as provided in subsection (D) shall revise the data as identified by the Department and shall submit the revised data to the Department within 15 business days after the date the Department returned the data or within a longer period agreed upon between the Department and the submitting health care institution.
- **F.** Within 15 business days after receiving a written request from the Department that includes a simulated patient medical record, a submitting health care institution shall prepare and submit to the Department the data set identified in Table 1 for the patient described in the simulated patient medical record.